

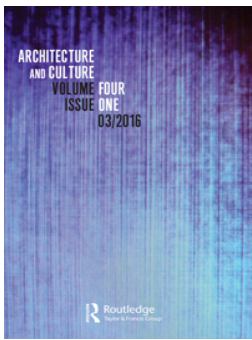
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Using Game Design as a Frame for Evaluating Experiences in Hybrid Digital/Physical Spaces

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ARCHITECTURE AND CULTURE

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Using Game Design as a Frame for Evaluating Experiences in Hybrid Digital/Physical Spaces Lara Salinas, Paul Coulton and Nick Dunn

ABSTRACT This paper explores the perceptions of public and private information spaces through the creation of a novel experience, known as Chattr, wherein a physical public space was created within which people's conversations and actions were subject to some of the rules that would normally apply to interactions taking place in online social networks. The authors consider people's experience of Chattr at two different venues, and use games design as a lens through which to evaluate such hybrid experiences. This games lens frames Chattr as a system whose formal structure is governed by rules operating at three levels: constitutive, operational and implicit, and helps identify how differences in each venue altered the nature of the experience. We believe using game design in this way, to frame physical/digital spaces, helps a greater understanding of the complexity of our interactions in such spaces by revealing how the different digital and physical rules governing these spaces ultimately affects our behavior.

Introduction

Urban public space has always been a contested realm within which different interests overlap and different agendas have to be negotiated. In 1967, sociologist Henri Lefebvre published *Right to the City* which challenged the top-down ethos of modern urban planning, and instead argued for a city's inhabitants to be able to appropriate actively the time and space of their surroundings.

Contemporary urban public spaces are not limited to physical territories, but their information is extended through digital platforms, in a wide diversity of relations and synergies between place-based and tele-mediated exchanges that produce new types of spatial arrangements.¹ This convergence between physical and digital information generates new senses of place; as a result of negotiation between physical dimensions and electronic flows.²

The urban environment is reconfigured in a multiplicity of heterogeneous hybrid places. Academic literature specially calls for flexible approaches to public and private that reflect the heterogeneity and multiplicity of space and time in contemporary urban spaces. Approaches based on static propositions are no longer applicable, i.e. gradient semi-public and semi-private, and may be replaced by "new hybrids of private-in-public and public-in-private."³ Urban experience is situated in both and neither, multiple publics and privates.

Contemporary urban spaces are increasingly dynamic configurations of people, technologies and places; always contingent, constructed and negotiated. Stephen Graham and Patsy Healey call for new conceptualizations of place based on relational views and the notion of multiple simultaneous perspectives of socially constructed experiences.⁴ As Joshua Meyrowitz suggests, individuals adapt to manage the tensions between public and private created by media, according to the specificities of the situation.⁵ However, due to the multiplicity and complexity of media, in order to adapt to the situation, individuals face the challenge of understanding the interplay of physical–digital features and the potential reconfigurations of space. Regarding the pervasive application of information technologies, Dana Cuff calls upon designers, architects and urbanists to design to provide information, choice and control; raising awareness about the otherwise imperceptive systems of embedded networks that reconfigure space.⁶

Urban games such as those devised by the Situationists in Paris⁷ sought to encourage people to step off their usual path and to look at these familiar spaces differently with a view to appropriating them outside their official use. The practice of *détournement* is the distortion of pre-existing elements, reorganized to originate a new meaningful ensemble. Distortions introduced are directly related to the original context of the elements, and constitute a powerful critical and cultural tool.⁸ The construction of situations is a notion closely linked to play, Guy Debord and Gil J. Wolman argue, as it happens in games, entire

situations may be detoured simply changing a determinant condition of them.⁹

In a similar manner to *détournement*, distortions of the elements that make up hybrid spaces have the potential to reconfigure situations, and enable critical reflection upon the interplay of people, technologies and places. In this research we therefore argue that game design offers a critical frame that not only reveals the complexities of hybrid spaces but also provides a means of considering hybrid social spaces more generally. In particular it facilitates an understanding of the interplay of formal elements, and the interconnection of physical and digital contexts, that affect experience.

Game as design frame

The notion of what constitutes a game has produced a number of definitions, but arguably the most useful is that of philosopher Bernard Suits from his *The Grasshopper: Games, Life and Utopia* (1978) in which he says:

To play a game is to engage in activity directed towards bringing about a specific state of affairs, using only means permitted by rules, where the rules prohibit more efficient in favour of less efficient means, and where such rules are accepted just because they make possible such activity [...] playing a game is the voluntary attempt to overcome unnecessary obstacles.¹⁰

What this and many other definitions share is the emphasis on rules and either the implicit or explicit assumption that games take place in a space often described as the magic circle. The concept of the magic circle within games came into common use through games designers Katie Salen and Eric Zimmerman's adoption of the phrase in their *Rules of Play* (2003),¹¹ which they themselves adapted from Johan Huizinga's more general description in *Homo Ludens* (2008) which he used to describe "the place dedicated to the performance of an act apart."¹² Although these spaces are often explicitly defined by a computer game world, physical game board or even chalk lines on the pavement, there are games, such as the children's game of hide and seek, where the boundaries of the magic circle are more fluid and often under constant negotiation between players. It is this more fluid and permeable view of the magic circle that we consider to be most applicable to the hybrid digital physical experiences that uses real-world locations to form spaces which can be considered bound by game-like rules.

The following sections will expand on the role space and rules within games as these provide the foundation of the novel approach proposed for framing and evaluating peoples' experiences within the growing number of hybrid digital/physical spaces. Additionally, as the experience considered within this research relates to issues around

public and private information, we also consider games as information economies in order to address this attribute.

Game Spaces

Games that utilize real-world physical spaces as their magic circle are often described as pervasive games, although terms such as mixed reality, augmented reality, alternate reality, ubiquitous games, location-based games, big games and urban live action role play (LARP), to name but a few, are equally applied. Steffen Walz reframed the settings for such games as “playces” through his analytical framework of games as architectures.¹³ In this work, Walz highlights Lefebvre’s concept of Rhythmanalysis – “Everywhere where there is an interaction between a place, a time and an expenditure of energy there is a rhythm”¹⁴ – which Iain Borden suggests relates to the psychological concept of flow,¹⁵ further developed by Mihaly Csíkszentmihályi.¹⁶ Flow is often cited as a desirable quality for games to maintain player engagement over a sustained period, as it constantly seeks to keep a player at the edge of their abilities and thus absorbed. By equating these two concepts, Walz appears to suggest that if games that utilize physical space are to be engaging, the physical space must also be viewed in relation to how it aligns with the flow of the game play. Whilst this seems useful for the games that utilize avoid and/or chase as their core game mechanic,¹⁷ it seems less relevant to those where movement is not the primary driver of the game. Therefore, we argue it is more appropriate in such cases to draw upon Lefebvre’s triad spatial model that includes social space (representational space), physical space (spatial practice), and mental space (representations of space).¹⁸ Physical space refers to the concrete space people encounter in their daily environment, and mental space refers to our conceived constructions of space. Social space is the complex combination of perceived and conceived space.

Despite the difficulty of mapping Lefebvre’s theory of space onto computer games, Espen Aarseth suggests that while computer games host spatial practice, they are also both representations of space (formal system of relations) and representational spaces (symbolic imagery). Aarseth extends his argument and posits “spatial representation in computer games as a reductive operation leading to a representation of space that is not in itself spatial, but symbolic and rule-based.”¹⁹ This reduction of conceived and perceived moments into symbols and rules is essential in the constitution of the allegoric space of game play (magic circle), and we suggest this can be taken forward to approach hybrid spaces, in which a digital counterpart (symbolic and rule-based) strongly affects our experience of the space.

Similar to Lefebvre’s spatial triad, Salen and Zimmerman propose approaching game space as systems constructed by “[f]ormal, experiential and cultural qualities that always exist as an integrated phenomena”²⁰ and subsequently constitute a specific set of rules (form) within a given context (culture), from which meaning emerges

(experience). This consideration suggests that game design has a great deal to offer when considering people's experience within a context of physical spaces that are increasingly performed in relation to rules imposed by digital systems.

Games as Rule-Based Systems

Whilst we are familiar with the formal sets of written rules that might, for example, be supplied with a board game that provide players what they need to know in order to play the game, they do not completely cover the underlying mathematical logic or the expected player etiquette which also contribute to the experience of playing the game. To help designers consider more fully the nature of the experience they are creating, Salen and Zimmerman proposed a three-part rules model for understanding rules:²¹

- *Constitutive rules* are the abstract, core mathematical rules of the game. Although they contain the essential game logic they do not explicitly indicate how players should enact these rules.
- *Operational rules* are the 'rules of play' that players follow when they are playing a game. Operational rules direct the player's behavior, such as the amount of money allocated to each player at the start of Monopoly, and are usually the kind of rules printed out as instructions.
- *Implicit rules* are the "unwritten rules" of etiquette and behavior that usually go unstated when a game is played. Similar implicit rules apply to many different games.

It is interplay between these different types of rules that helps create a formal identity that allows us to distinguish a particular game as unique from other games. This identity emerges from the specificity of the relationship between the constitutive and operational rules of the game. The meaning of the game emerges through a process of playing and encompasses all three levels of the rules in the context of the games magic circle.

Having presented games in terms of rules and space we now consider the role of information, which has relevance when considering the role of the public and the private in such spaces.

Games as Information Economies

Games can be viewed from a variety of different perspectives, one of which is to consider games as "economies of information."²² Games often manipulate how much information is presented to each player to create the overall game play, for example, Salen and Zimmermann describe it thus: "When you create information in your game, its value for the player emerges from both its objective and perceived status: its structural position within a larger information economy and the players knowledge about that economy."²³ The degree of availability of information to players

within a game varies with each individual game with those where players publicly share all knowledge within the game, such as chess, being described as having perfect information, whereas a game such as Cluedo may be described as having imperfect information as some information is hidden from some or all players. Games with perfect information often produce more analytic game play, while imperfect information games tend to produce uncertainty and inspire distrust amongst players. In the context of this research we consider that imperfect information can be considered analogous to the relationship between public and private information.

Some games have emerged whereby players have developed an understanding of how they may use the information available within their game play as part of the tactics for playing the game. These tactics often manifest in players being deliberately ambiguous with their information within a game that is described as “obliquity,” where obliquity is defined as game play by an individual specifically designed to throw the other player off balance or “tilt” their actions.²⁴ For example, “bluffing” in poker is often used to unsettle the actions of the opposition and hopefully cause them to greater emphasis on less probabilistic outcomes.²⁵

In terms of hybrid digital/physical space, Lei Zhang and Paul Coulton linked ambiguity of information with “seamful design”²⁶, which is a concept that acknowledges that despite the near ubiquity of computer networks, user connectivity is not a seamless process and noticeable edges or “seams” in the connectivity are readily apparent to the majority of users.²⁷ Seamful design proposes that rather than try to build a system that tries desperately to overcome or “hide” these inconsistencies, they should be incorporated into the design itself.²⁸ Zhang and Coulton argued that in imperfect information games information can often be considered as existing on a seam whereby private information may be deliberately made public by either the system or the players,²⁹ which is highly applicable to the experience described below.

Chattr Design

The concept for Chattr was originally conceived during a Creative Exchange workshop in January 2013 whose aim was to produce proposals for short experimental projects that could explore the notion of the digital public space³⁰ by interdisciplinary teams, typically following a research through design methodology³¹. The original concept, “Chatter – In Sync in the Digital Public Space,” was a proposal to explore different applications of linguistic style matching (LSM),³² by providing real-time visual feedback of the degree to which participants could vary their word choices in phone conversation between two randomly assigned participants. Unfortunately, the concept was both technically difficult and ethically controversial. As Creative Exchange is an academic research project all sub-projects are bound by university ethical research requirements of informed consent, which means that

the data-collection process had to be absolutely clear and transparent to all participants and designed to guarantee anonymous contribution and right to withdraw from the experiment. The differing expectations between research ethics and artistic experimentation led to tensions resulting in two very different implementations. The original proposal for transcribed conversations that feed back into live conversations to affect participants experience, and question ethical practices, was developed by Kyle McDonald and Brian House into 'Coversnitch' and presented in May 2014 as a system of eavesdropping lamps that live-tweet private conversations.³³ The second implementation and the subject of this paper is "Chattr – an experiment on privacy and ethics" and was designed such that it maintained the provocative nature of the original concept whilst conforming to ethical requirements through the production of an experience in which people would have to negotiate unknown boundaries between physical–digital, public–private, live–archived, and local–global. This was to be achieved by creating a café lounge in which users' interactions were subject to the application of a data-use policy that mirrored those typically employed on social media platforms such as Facebook, Twitter or LinkedIn.³⁴

The Chattr lounge was to be a clearly branded space under the tagline "your privacy is very important to us" and deliberately portrayed as having distinct physical benefits over the surrounding area, for example, free coffee, better chairs, a better view. By choosing to access the Chattr lounge participants would be required to accept the Chattr Data Use Policy (DUP),³⁵ which would require them to carry a recording device within the lounge, for all spoken conversations would be recorded, transcribed and archived in a publicly accessible database that would remain permanently in a public space online.

Following an extensive series of discussions with the university's ethics committee, the Chattr DUP primarily states that the Chattr project is not responsible for the content of transcribed conversations, nor how transcribed conversations might be interpreted. Once transcripts have been published, they will become the public domain, and the project will retain no control over them, thus it might not be possible to erase published conversations permanently, nor to prevent them from been spread through other online social platforms.

Therefore, Chattr represents a situated system that enhances the conflicts and tensions between physical and digital space, encouraging participants to reflect critically upon their privacy choices and to acknowledge the entanglements and seams between the physical and digital information spaces they inhabit.

The data-collection strategy was designed to provide a holistic approach to Chattr experience, assessing physical/digital counterparts: active/passive participants and non-participants insights alike. Ethno-methodological research methods were adapted to the festival conditions³⁶ and acknowledged the limited time and bustling environment. Apart from observation and semi-structured interviews,

digital ethnography³⁷ was applied through Chattr's archive of transcribed conversations and social media interactions.³⁸

Reflections on Chattr using Games as a Lens

Here we consider people's experience of Chattr as it was presented at the festivals FutureEverything (Manchester) and TodaysArt (The Hague) held during 2013. We will utilize the previously discussed approach of considering people's experience of Chattr using game design as a lens. In particular, the experience that emerged from the interaction with a set of rules (constitutive, operational and implicit) that served to create the overall experiences. This rule-based categorization allows us to acknowledge the hybrid condition of the space in a structured manner, and gain an understanding of the impact that different elements had in the configuration of the situation.

In the following we describe Chattr in FutureEverything (Chattr FE) and in TodaysArt (Chattr TA) according to our classification of their constitutive, operational and implicit rules.

Constitutive rules

The constitutive rules are independent of specific location and at both venues the Chattr lounge was strictly restricted to delegates who had accepted the terms and conditions defined in the DUP. The primary constitutive rules of the DUP were as follows:

- Participants must read and accept DUP before entering the Chattr lounge.
- Participants must carry a recording device and return it on their way out.
- Participants' interactions within the space are at their own discretion.
- Recorded conversations are transcribed.
- Unabridged transcriptions are published and available online.
- Participants are responsible for the content of their transcribed conversations.
- Participants can withdraw at anytime. Once a conversation is published online, complete deletion cannot be guaranteed.

Constitutive rules represent the essence of Chattr, but are abstract, and are not affected by either the location or the participants within the experience. However, these constitutive rules need to be contained and materialized as a set of operational rules for a particular venue to provide guidance about how to interact with the system. Despite Chattr efforts to convey the contents of the DUP, participants would often only take a superficial look before signing and join Chattr without having a clear sense of how Chattr would operate.

I wonder who gets to sit in this section, yeah but not everyone has been asked, I wonder who, who and why.³⁹

would it be censored? Uuh we have not looked at the terms and conditions⁴⁰

it's getting personal. did you actually know what you signed for? you sold your soul to them.⁴¹

Operational rules

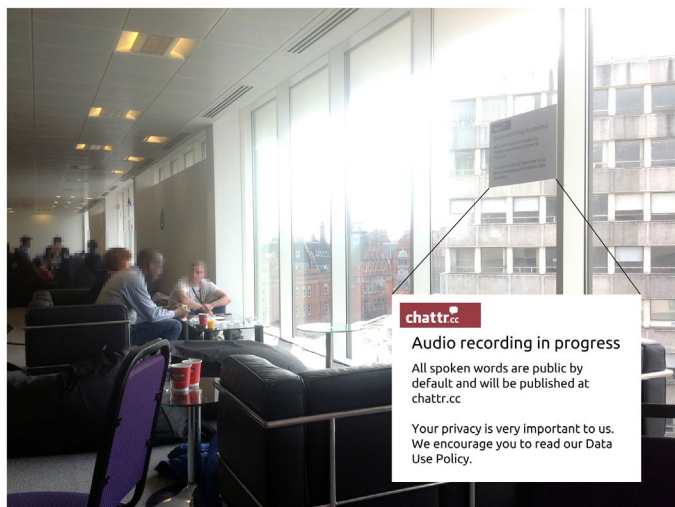
In spatial terms, operational rules refer to the representation of space, elements that constitute the formal structure of the space and have a direct impact on shaping participant interactivity and their choices in that space. Considering the case of Chattr, the constitutive rules may be embodied in different sets of operational rules in different venues, giving rise to different spaces, behavioral guidelines and therefore experiences.

For instance, as a response to the constitutive rules, the design of Chattr sought to favor casual encounters and face-to-face unmediated conversation, where conversational partners had to be in synch to negotiate the surveillance system. Nevertheless, the specifics of Chattr materialization in each event, i.e., layout and interactive elements resulted in two different implementations of the constitutive rules, provoking two separate sets of operational rules that guided participants to enact Chattr in disparate ways.

Operational rules at Chattr FE

FutureEverything is a week-long festival that encompasses art, music and discussion about digital culture. Chattr was installed as part of the two-day Ideas and Innovation Summit, which is the central event for the festival and was held on 21–22 March, and had 499 attendees. The summit program ran from 9:00 to 19:00 hours across four different floors of Four Piccadilly Place, an office block in the center of Manchester. During conference breaks, delegates were encouraged to network in the café located on the seventh floor of the building.

The café occupied a continuous surface of 700 square meters interrupted by a red velvet rope that run alongside the glass wall, appropriating one-third of the space as Chattr's lounge, with a capacity to host about thirty participants. The Chattr lounge was deliberately made desirable by offering something that the rest of the venue lacked, such as panoramic views of the city center, power sockets and smarter furniture orientated to facilitate easy interaction between delegates. Informative signs were placed so that participants were made conscious of the fact that they were exchanging their privacy for perks (Figure 1).



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Figure 1
Chattr lounge at FutureEverything 2013.
Source: authors.

Delegates who agreed to take part were provided a printed copy of the DUP, a clip-on microphone set and were asked to read out loud a reference code that would serve to identify the user anonymously, in case he/she wished to withdraw within the two-hour reconsideration window, and thus allow transcribers to recognize the voice that should be transcribed. Before leaving the lounge, participants returned their recording devices.

Behind the scenes the recording devices were transported regularly to a separate location, where a team of three professional transcribers processed the conversations and then deleted the audio files. After the two-hour reconsideration window, unabridged transcribed conversations were published online hourly using PasteBin.com. Snapshots of the conversations were curated and broadcasted through the Twitter accounts @ChattrLeaks and @ChattrBot,⁴² posting more than 120 tweets and receiving more than 100 interactions during the festival weekend.

The transcribed conversations were not directly displayed in the café and access was only available to participants using Twitter on their own personal devices, or alternatively by word of mouth from others who had observed the Twitter stream. Although unabridged conversations and snapshots were publicized via Twitter, participants would typically join Chattr without having seen previous outcomes. Their participation was based on speculations about the system, i.e., outcomes, scope, potential effect on real life:

So what happens to it. Oh my god, you're kidding. [...] So it's being transcribed, then it will go online, with any formatting?⁴³

this is like kissing whilst being watched. Hmm maybe after a while you don't think about it anymore.⁴⁴

The archive of transcribed conversations created an imperfect information system. Some information was inevitably missed in the transcription process; outcomes could be neither controlled nor verified. The Chattr FE experience was mainly focused on deciphering constitutive rules, looking for flaws in operational rules that allow subversion, hence encouraging the obliquity or acts of creative resistance, by taking advantage of weaknesses in the operational rules to avoid the surveillance system, i.e., speaking in foreign languages, muffling voices, impersonating or remaining silent, as reported by transcribers:

How is your Dutch⁴⁵

[coughs] [whispering] [coughs] [laughing].⁴⁶

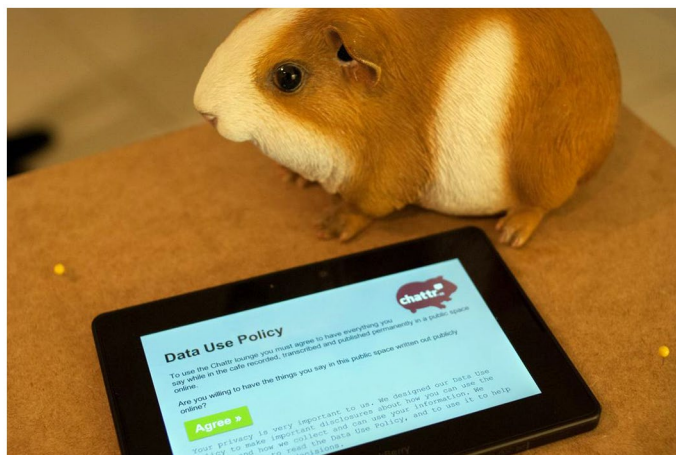
However, not all strategies were equally successful. Spoken conversations could be easily misinterpreted and take a direction that was not suitable for the purposes of recording, not to be shared with the rest of delegates:

So anyway this is a conversation I can't really have with one of these things on [laughs].⁴⁷

Operational rules at Chattr TA

TodaysArt was a two-day art and music festival held in different locations across The Hague city center in the Netherlands on 27–28 September 2013. In its ninth edition, “Unauthorized Permission,” the festival was hosted in the former Ministry of the Interior, which once accommodated the National Crisis Centre, the Emergency Office and the Secret Service. The nineteen-storey tower opened to the public for the very first time during the art festival, receiving 5574 visitors. Chattr was open from 19:30 to 22:30 hours on Friday and from 12:00 to 22:30 hours on Saturday.

After passing through the building's security doors, visitors would enter the foyer and find the Chattr lounge behind three trolleys holding twenty-three guinea pigs,⁴⁸ which were modified garden figurines that hosted an audio-recording device that was activated as soon as it was picked up (Figure 2). Upon accepting the DUP, displayed on a tablet, each group of participants was provided with a guinea pig and access to the café, a twenty square meter former smoking-room that offered free refreshments and could host approximately fifteen participants on three sofas and a number of chairs (Figure 3). Next to the café exit, two volunteers transcribers fluent in Dutch and English collected the guinea pigs and transcribed all spoken conversation captured by the recorders (Figure 4). Transcribed conversations were published on the official website created for the occasion⁴⁹ and broadcasted on Twitter. Two screens located in and outside the café displayed the transcription process live. The outcome of



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Figure 2
Data Use Policy (DUP)
and one of the guinea pig
garden figurines with an
embedded recording device
at Today's Art 2013. Source:
authors.



Figure 3
Interior of the Chattr lounge
at Today's Art 2013. Source:
authors.

participants' interactions entered the scene automatically, and although the Chattr lounge had restricted access, from the outside attendees could have a general view of the lounge, i.e., screen displays, transcribers and participants with their guinea pig figurines (Figure 5). A total of eighty conversations were published. The Twitter account @ChattrLeaks published more than fifty tweets, registering no interaction.

Participants' interaction with the system seemed mainly aimed at generating content to be broadcast (feeding the screens), rather than the content being generated as an almost accidental byproduct of participants' conversations. Participants would typically follow the transcription cycle, expecting to recognize their group conversation. Although Chattr's conversations were still being publicly archived online, the digital counterpart was neglected; instead, attention was directed to

the physical counterpart, especially to the asynchronous transcription process *in-situ* on the screens (Figure 6):

I really want to see my private conversation on the screen.⁵⁰

you want to steal the guinea pig?
But if you steal it, they will never be able to write it down that's a shame.⁵¹

Don't do that. That's annoying. Is this really a machine? Yes, they are on the corner typing all we say. Really?⁵²

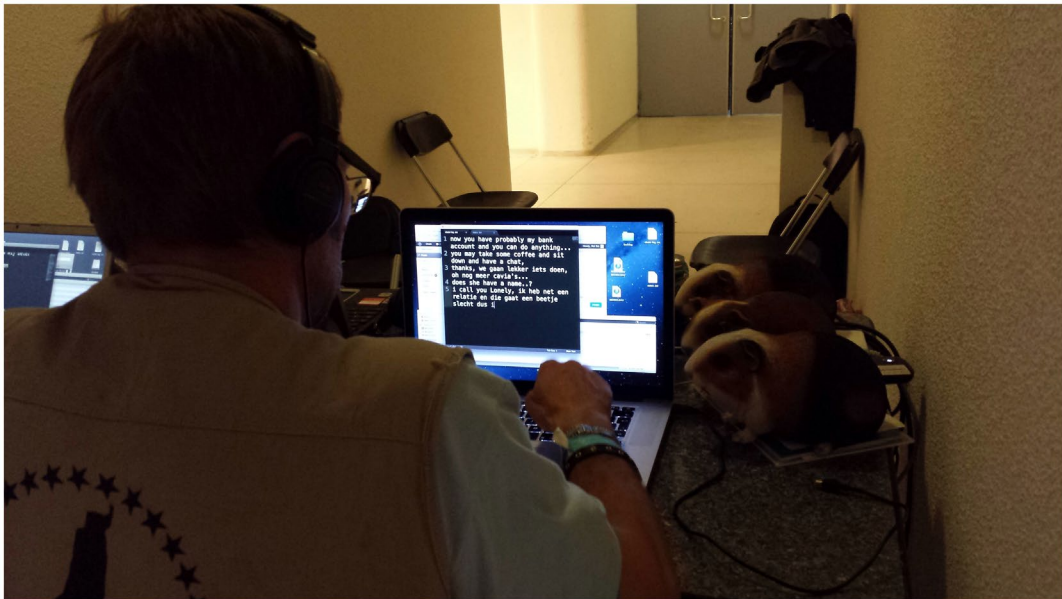


Figure 4
Chattr transcriber at TodaysArt 2013. Source: authors.



Figure 5
Interior of the Chattr lounge
at TodaysArt 2013, seen
from the outside. Source:
authors.

The implementation of constitutional rules diverged in each event, shaping two distinct sets of operational rules. In Chattr FE, the process by which audio recordings were transcribed and published online occurred behind scenes, and therefore remained a mystery for participants and broader audience, therefore the operational rules were unclear to participants. In contrast, the variation of Chattr's formal elements at Chattr TA gave participants easy access to constitutive rules as they were embodied within the venue, creating an illusion of transparency, in which the Chattr system was disclosed by the visibility of transcribers, who became part of the space, and the inclusion of screens broadcasting the transcription process live.

Implicit rules

Implicit rules were drawn from the event's physical appearance and encompassed those normally considered for a café space with others from social digital networks, thus entangling two different sets of rules that temporarily disrupted spatial practice.

Implicit rules at Chattr FE

The FutureEverything café, busier during conferences breaks, was mainly a professional and networking environment with a distended atmosphere. Privacy was most valued, and social network profiles carefully curated. The boundaries between the space of play and ordinary life were at risk of being dissolved, as participants' performance within Chattr might become part of a wider event. For instance, in semi-structured interviews with delegates who refused to participate, they typically found Chattr to be a space full of contradictions that could not be reconciled. Quite often participants argued that the lack of control by being indiscriminately broadcasted implied was not suited for a professional environment. Despite the liquid boundary between game space and real life, transcribed conversations spread through tweets were seldom feedback into



Figure 6
Participants returning to see their transcription at Chattr Today'sArt 2013. Source: authors.

the lounge, and just on rare occasions transcended as the subject of participants' conversations or were re-tweeted.

I've been talking to the man from the cabinet office whilst being recorded and we started talking day jobs then we had to stop talking day jobs whilst being recorded.⁵³

Moreover, unabridged online conversations were broadly ignored, for the website received insignificant traffic. Chattr's promise of a publicly available online database of conversations was more threatening than the database itself, conditioning participants' interactions.

Implicit rules at Chattr TA

The grey former ministry building that hosted Today's Art, and that once accommodated the National Crisis Centre, the Emergency Office and the Secret Service, infused the space with a cold aura of solemn totalitarianism. Whereas the setting reinforced Chattr's surveillance, it was in direct contrast to the carnival-like atmosphere of the main festival. The general mood was festive, welcoming surprise and experimentation, and participants roamed from venue to venue featuring certain a degree of anonymity. Most importantly, Chattr TA-disclosed operations created a false sense of locality, for all attention was drawn upon the process, i.e., recording, transcription and local broadcasting. Chattr was mistakenly perceived as a local event, as the digital archive was neglected in favor of *in-situ* screens. The immediate aspects of the experience eclipsed the existence of a media broadcasted event. As a live and local event, the archive of conversation lacked interest, making Chattr a closed system with a limited chance of entering everyday life:

we just put a bomb in the tube, in London. Skippy don't listen to him! There is no bomb. [...] Thomas, what is your surname? Where do you work, Thomas? Thomas, what is your telephone number?⁵⁴

Conclusions

In this paper we have argued that the convergence of physical and digital information flows generates new senses of place. The hybrid character of public spaces calls for an understanding of the interplay of physical–digital features that operate and how this interplay reconfigures the space and adds new complexities within the concepts of public and private. In order to evaluate the experience of such hybrid space we need techniques that can adequately incorporate the digital and physical simultaneously. Due to the rule-based nature of these spaces,⁵⁵ and in order to tackle with the complexity of understanding the interplay of physical–digital features, we have proposed a game design lens that allows one to consider not only physical elements of space but also the

networks embedded in it and which would reconfigure the space.⁵⁶ It is worth noting that we are not suggesting activities should be made more game like (gamified), but utilizing the fact that many of our social practices have game like qualities as Huzinga highlighted.⁵⁷

In order to illustrate this approach, we applied it to the experience of Chattr at two different venues. As a *détournement*, Chattr has distorted pre-existing elements, from a café and social media platforms to a new meaningful ensemble. Chattr's seamful design⁵⁸ and the deliberate ambiguity in how information is presented made manifest tensions between physical–digital spaces. Participants had to negotiate physical and digital features of the space, which rather opposed privacy settings, confronting users to a synthesis of behaviors.⁵⁹

We went beyond the acknowledgment of the hybridity of the space (Figure 7) by analyzing the (hybrid) Chattr experience as determined by constitutive, operational and implicit rules (Table 1). Looking at how participants negotiated their privacy choices in the entanglement of physical and digital, we learnt about the interplay of different elements that configured the situation. The comparison of Chattr's iterations has shown how design choices in operational rules affecting visibility, access to information and control of the digital counterpart are specifically relevant in the definition of public–private character of the hybrid space (Figure 8). For instance, due to Chattr FE's hidden infrastructure, the operations belonging to a (physical) café were favored. Paradoxically, the implicit rules of the networking café encouraged participants to be quite aware of the digital archive being generated. The difficulty of controlling physical–digital features made participation potentially risky if transcribed conversations were to spread beyond a face-to-

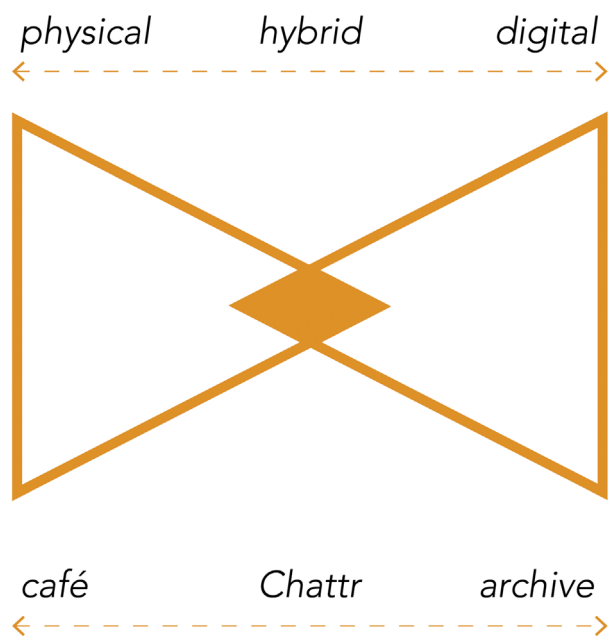


Figure 7
Hybrid physical/digital
space.

Table 1 Summary of the rules in the Chattr lounge at FutureEverything 2013 and TodaysArt 2013.

	Chattr FE	Chattr TA
Constitutive rules	Hidden	Visible
Operational rules	Clip-on microphones (nuisance) Broadcast through social networks Only access to outcome via personal devices	Hacked guinea pigs (playful) Broadcast through social networks and screens <i>in situ</i>
Implicit rules	Networking Open system Among acquaintances or colleagues Broad use of social networks	Festive mood Close system Among friends or strangers Scarce use of social networks

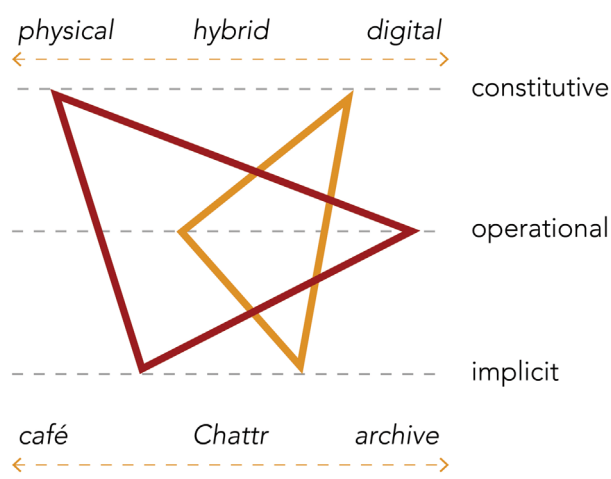


Figure 8
Dynamic hybrid physical/
digital space using game
design as a lens.

face conversation. Therefore, although the digital counterpart was not as obvious and embedded as in Chattr TA, it was influential when configuring participants' interactions. On the other hand, in Chattr TA the transcription process was more prominent and materialized the operational rules, drawing the attention of Chattr participants. As the event was mistakenly perceived as local, and therefore not a networked space, the implicit rules of a physical café dominated, and the public character of social platforms was transferred to the physical space to a much lesser extent than at Chattr FE. Although constitutive rules remained the same in both iterations, as spoken conversations were being transcribed and published online, participants experienced it in radically different ways, and adapted to the specificities of each situation.

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Using Game Design as a
Frame for Evaluating
Experiences in Hybrid
Digital/Physical Spaces
Lara Salinas, Paul Coulton
and Nick Dunn

Lara Salinas is a practitioner and researcher with a background in art and technology specialized in creative uses of locative media and social web. As a practitioner she has participated in a number of international festivals, outstanding TodaysArt (Netherlands) FutureEverything (UK), Urban Transcript (Italy), NewMediaFest (Germany) and Web Biennial (Turkey). She is currently carrying out a practice-based Ph.D. at The Creative Exchange in ImaginationLancaster, exploring the production and experience of places in physical/digital hybrid public spaces.

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